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ABSTRACT

The academic community is very concerned at this time to develop measures of professor adequacy against which to validate students' evaluations. Sweney and Weston (1970) found ten independent dimensions which explain attitudes and expectancies of their professors. These became the basis for the Learning Encounter Measure (LEM). Many of these dimensions suggested underlying intrafamilial attitudes. The studies reported related scores on LEM with interpersonal attitudes from the Chromatic Differential Test (CDT). 188 college students involved in a tutoring program took the LEM and CDT as part of their in-service training program. The intercorrelations found on these two scales indicated very strong relationships between intrafamilial attitudes and preferred professor behavior. The results indicated that needs for structured simplicity were related to rejection of self and negative association with mother. The needs for professor control was related most to negative feelings to father and some negative attitudes toward mother and self. (Author/BW)

PROJECTIVE MEASURES OF INTRAFAMILIAL ATTITUDES AS A FUNCTION OF VALUE JUDGMENTS ABOUT HIGHER EDUCATION

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INTRODUCTION

Recent research into the attitudes and value systems of college students has indicated that they are evaluating their professors and their total experience along large number of dimensions even though their verbalizations usually are over simplified and summarize the experience as "good vs bad" and "tough vs easy". Sweney and Weston (1970) found ten independent dimensions which explained student evaluations and expectations of their professors. These dimensions evolved from an effort to measure open vs closed people systems and hence, probably are not sufficiently inclusively to summarize all of the value dimensions involved. Through the process of factor analysis and scale development, Weston and Sweney (1970) developed an instrument to measure student value systems, the Learning Encounter Measure (LEM).

Betz et al (1970) report on a system for measuring college students satisfaction. Sheehan (1969) developed some new method for measuring school environment. These studies and others more specifically focused on CUE'S test by Pace (1963) reflect a growing interest and concern in the psychological dynamics of the process involved in higher education.



Rehberg and Westby (1967) shows that adolescent expectations were highly related to socio-economic variables as well as to parental encouragement. Strodbeck (1958) at an earlier time had indicated a high degree of interaction between family value for achievement and student's own needs for achievement. Meier (1970) has shown that significant generation differences exist concerning simple value orientation toward higher education. These studies deal with covert attitudes and simple acceptance and rejection of the educational process and hence, do not deal complexly with the intrafamilial attitudes nor with the complex value expectations which they generate.

Efforts to obtain covert measures of intrafamilial attitudes and sentiments were reported by Delhees, Cattell, and Sweney (1970, 1971). These studies indicated that motivational investments in other family members act as organizing principles and can be measured systematically and effectively. From a different vantage point, Sweney, (1972) reports significant intrafamilial attitudinal effects on behavior with scores obtained from the Chromatic Differential Test (CDT) applied to a sample of pre-delinquent boys and their parents.

Many advocates of the "new look" in education have suggested that the secure individual coming from a secure home environment should have a high tolerance for the ambiguity represented by the unstructured school environment. The purpose of this study is to ascertain whether the complex value systems measured with the Learning Encounter Measure (LEM) can be shown to be related to self concept and intrafamilial attitudes.

METHOD

Subjects:

The 188 subjects used for this study were selected randomly from a larger population of volunteer tutors who were teaching educationally deprived public school children under the auspices of the local community action program. About three-quarters of the subjects were female and all of them were college students from highly varying curricula.

Instruments:

The Weston's and Sweney's (1969) <u>Learning Encounter Measure</u> (LEM)was the outgrowth of several research projects involving student evaluation of professors, and reflects the implicit value systems employed. The ten scales were derived using orthogonal factor analysis and hence, have moderately low correlations with each other.

The LEM, scale 1, Simple vs Open Complex, measures the degree to which students prefer a teacher who uses well structured notes, objective examinations, makes every point very clear, and determines grades in a precise way.

LEM scale 2, "Professor Control vs Student Control", seems to measure the degree to which students prefer a professor who is calm and controlled and who insists upon making decisions involving the student's programs and the content and conduct of the courses he teaches. LEM scale 3, "Evaluation Aversion", reflects the perceived needs or aversion of students for external evaluation. LEM scale 4, "Professor Distance vs Professor Accessibility", taps the degree to which the student wishes to place his teacher on a pedestal or to have him close enough to encounter directly. LEM scale 5, "Participative



Classroom Environment", suggests the high variability in students as to the degree to which they wish to participate in the classroom teaching experience.

LEM scale 6, "Moralistic Reproach vs Tolerant Acceptance of Professors", measures the degree to which religious value systems are being applied to the educational encounter. LEM scale 7, "Student-Professor Antagonism vs Plus-Sum Relationships", reflects the degree to which the student perceives the professor as an adversary to be repudiated rather than an ally to be supported. LEM scale 8, "Creative Individualism vs Routine Conformity", seems to measure the degree to which the student is seeking a climate conducive to his pursuit of his own educational interest. LEM scale 9, "Professor Discussion Leader Role vs Professor Lecturer", indicates the degree to which students wish the professor to be more informally stimulating. LEM scale 10, "Professor Identification vs Professor Rejection", measures the degree to which the student respects academicians and wishes to be like them.

The Chromatic Differential Test (CDT) was developed by Sweney and Bowles (1970) to measure closely censored data concerning affective associations with self and significant others. The instrument includes a color plate consisting of six chromic scales each having ten discrete intervals. The segments of the scales are systematically defined by graduated changes in their composition by basic lithographer's colors. The procedures for administration involves first the selection of most liked and least liked colors from each scale by marking those colors on clear plastic overlays. In the same way, the subject makes associations of the colors with six emotions and then with significant others



and self. The ten plastic records obtained in this manner are then compared with each other to find measures of association between people and emotional preferences. The scores obtained are distance functions in color scale intervals.

Simple relationships between variables were calculated using Pearson

Product Moment Correlations coefficients. The significance level was based

upon a two-tailed error distribution since no a priori hypotheses were

firmly stated before the study.

The canonical factor analysis was conducted using the BMD program adapted for the IBM 360-44 system computer. The significance level was established using the variance method.



RESULTS

Simple correlations were calculated for all combinations of variables in order to obtain the correlation coefficients between pairs of variables selected from each of the two realms. The significant correlations have been arranged by learning encounter scales to illuminate the effects of intrafamilial attitudes on each.

Insert Table 1

The desire for structured simplicity seems to be largely related to negative attitudes toward mothers and self coupled with estrangement and alienation of self from mother. The highest correlations are the negative associations of mother with love and success.

Insert Table 2

The desire for the professor to exercise high control and to maintain a distance seems to be related to great distances between self and both parents. The negative association of father and love as the highest correlation found in this study. The negative association pattern with parents unbroken by any reversals.

Insert Table 3

Evaluation Phobia is relatively unrelated to familial attitudes. It's correlated at the .01 level of significance, however, with the association of success to self and to mother. Some relationships to negative associations with father also are present.



Insert Table 4

The assumption that Professor-Student Distance is desirable seems to be related to the student's self acceptance as measured by success and his rejection of his father. This alienation is emphasized by his distance he places between himself and his father.

Insert Table 5

Participative Learning is sought by students who have lived in a closely associated home where there is positive association not only between the parent but also between themselves and their parents. The lack of hostility and netative affect is exemplified by the significant negative correlation on all the anger and dislike associations.

Insert Table 6

The tendency to assume a position of moralistic evaluation of the teacher's behavior seems to be unrelated to the family attitudes of the student except his association of sadness with his mother. The Puritan tradition of stoicism and rejection of pleasure would predict that this particular family association should be the highest.

Insert Table 7

Student-Teacher Antagonism sees the concept that the student and teacher are competing with each other in a zero-sum game does not seem to be transferred from the family scene.



-8-

Students perceiving this struggle seem to have a positive association of mother with father and a positive self image.

Insert Table 8

Creative Individualism seems to be sought by the individual who associated his mother and father with neither love nor anger. The cool objectivity of such a home might reasonably lead to the detached isolation of highly creative but individualistic people.

Insert Table 9

<u>LEM</u> scale 9 (Discussion classes) was only minimally related to the family association variables. Five correlations were statistically significant but the pattern was somewhat ambigious and theoretically uninterpretable.

Insert Table 10

The desire to emulate or identify with the teacher seems to be associated with a happy but not affectionate relations with a mother and a personal feeling of success, but not happiness. To students, "success" is frequently equated with success at school work. This leads to the continuation of this success by becoming a teacher.

Insert Table 11

Table 11 indicates the change in the educational value systems measured by <u>LEM</u> as a function of age. The most dramatic change is the decrease in the perception of professor-student antagonism. Maturational patterns are



also found in an increased desire for an open complex system and for less teacher control. Older students seem to be less moralistically condemning of professors as measured by <u>LEM</u> 7, but seem to also be less desirous of becoming like their professors.

Table 11 also indicates the degree to which the Learning Encounter

Measure Scales are independent in spite of the similarity in connotation
of the scale titles. These correlations present a positive manifold suggesting that much of the correlation between them may be related to response styles such as acquiescence or social desirability.

DISCUSSION

The results provide strong positive indications of the relationships between projectively measured family associations and educational value systems measured by questionnaires. The high level of significance of findings can not be explained readily by the response styles which plague the questionnaire area.

The high independence of the <u>LEM</u> scales emphasizes the likelihood that each table in this article actually describes manifestations of distinctly different dynamics. Other studies should test the speculations concerning the nature of these dynamics.

This article represents one of the first to describe the operation of and results obtained from the <u>Chromatic Differential Test</u>. The results show the promise of this kind of instrument for the naturalistic study of personality dynamics as well for direct assessment purposes.



The results add to the growing body of knowledge involving intrafamilial attitudes and the methodology for measuring them. In spite of the application of highly diverse measurement strategies all of these studies indicate that the "relationship" is a sufficiently potent construct to organize homogeneous scales.

SUMMARY

In order to test the assumption that value systems stem from basic relationships within the family, a sample of 188 college-aged tutors were tested on intrafamilial attitudes as measured by the Chromatic Differential Test (CDT) and were administered the Learning Encounter Measure LEM) for indications of their value systems concerning higher education. Strong correlations were found in expected directions between the attitudes concerning self and parents and the value expectations which they projected upon their college experiences. Positively associated affects with self and parents were correlated with values for open complexity, low professor control, professor-student closeness, participative learning, tolerant acceptance of professorial behavior, low student professor antagonism, creative individualism, and professorial identification. Negative associated affects with self and parents were correlated with values for structure, professor control, evaluation aversion, professor-student distance, passive learning, moralistic evaluation, student-professor antagonism, routine conformity, class discussion, and low psychological identification with professors.



Table 1: $\underline{\text{LEM}}$ Scale 1, Structured Simplicity with Intrafamilial Attitudes N = 188

			Simple Corre	lations
SSOCIATION	(with)	Father	Mother	Self
Anger			, 	+.249 *
Happiness			-256**	245**
Success			-278**	
Love			-297**	
Mother				-237**
Self			-237**	

Table 2: Correlations of LEM scale 2 (Professor Control) with Intrafamilial Attitudes N=188

	Simple	Correlations	3
ATTITUDES	Father	Mother	Self
Anger		+265	
Happiness	-181*	-302**	-228**
Sadness		+202	
Success	-273***	-278**	
Love	-403**	-291**	,
Like	-292**	-254**	
Father		-188**	333**
Mother	-188*		-337**
Self	-333**	-337**	um e/ 000 000

^{* 05 = 149}

^{}** 01 = 7.200

Table 3: <u>LEM</u>, Scale 3 (Evaluation Phobia) Correlations with Intrafamilial Attitudes on the Chromatic Differential Test(CDT) N = 188

		Simple	Correlations	,
ATTITUDES	(with)	Father	Mother	Self
Anger		+.146*		
Sadness		+.150*		
Success			+261**	+247**
Like		162*		
Father				-169*

Table 4: Correlations of LEM Scale 4 (Professor-Student Distance) with Intrafamilial Attitudes from the \overline{CDT} . N = 188.

	Simple	Correlati	ions
ATTITUDES (with)	Father	Mother	Self
Anger	+155*	+173*	
Success	-231**	-146*	+302**
Like	-326**	-177*	
Father	w		236**
Mother			183*
Self	-236**	-183*	

Table 5: Correlations between LEM Scale 5(Participative Learning) and Intrafamilial Attitudes from the CDT. N = 188.

	Sir	nple Correla	tions
ATTITUDES (wit	h) Father	Mother	Self
Anger	-339**	-207**	-224**
Sadness			-252**
llike			+.248**
Dislike	186*	-199*	266**
Father		+343**	
Mother	+343**		+2.11**
Self		+211	=

Table 6: Intercorrelations of <u>LEM</u> Scale 6 (Moralistic Evaluations) with Intrafamilial Attitudes on the <u>CDT</u>. N = 188.

	Sim	ple Correla	tions
ATTITUDES (with)	Father	Mother	Self
Anger		-143*	-133*
Sadness		-239**	

Table 7: Correlations of LEM Scale 7 (Student-Professor Antagonism) with Intrafamilial Attitudes from the \overline{CDT} . N = 188.

	S	Simple Corre	lations
ATTITUDES	Father	Mother	Self
Love			+172*
Like			+176*
Father		+.199	
Mother	+199*		

Table 8: Correlations of <u>LEM</u> Scales 8 (Creative Individualism) with Intrafamilial Attitudes from the <u>CDT</u>. N = 188.

	Simp	le Correlat	ions
ATTITUDES	Father	Mother	Self
Anger		-174*	-140*
Love	-166*	-198*	
Dislike	-170*		-193*
Mother			-177*

Table 9: Correlations of <u>LEM</u> Scale 9 (Discussion Classes) with Intrafamilial Attitudes on the <u>CDT</u>. N = 188.

	Si	mple Correk	ations
ATT I TUDES	Father	Mother	Self
Anger	+155*	+167*	
Love		- .	
Like	+144*		
Dislike	-143*		

Table 10: Correlations of $\underline{\text{LEM}}$ Scale 10 (Professor Identification) with Intrafamilial Attitudes from the $\underline{\text{CDT}}$. N = 188.

	Simple	Correlations	3
ATTITUDES	Father	Mother	Self
Anger		-150*	
Happiness			-160*
Sadness		-274*	
Success			+ 225**
Love		196**	
Dislike		196**	-176*

Table 11: Intercorrelations of Learning Encounter Measure (LEM) Scales

		Z	N = 188							
Scale	2	3	4	2	9	7	∞	6	10	Age
1 Structured Simplicity	.23	08	+.04	.08	.21	.21	.07	.10	.03	.19
2 Professor Control	;	60	.26	.07	.05	. 20	.14	. 28	.08	. 20
3 Evaluation Aversion	09	. !	.23	00.	01	.14	.17	.09	.16	60.
4 Professor Distance	.26	. 23	1	03	.39	.37	. 29	.15	.18	.12
5 Participative Climate	.07	8.	03	!	.08	.30	.17	.13	90.	.02
6 Moralistic Reproach	.05	01	. 39	.08	. 1	.30	.22	03	00.	. 20
7 Student Prof. Antagonism	.26	.14	.37	.30	.30	!	.27	.13	.16	.25
8 Creative Individualism	.14	.17	. 29	.17	. 22	.27	;	.20	.16	.15
9 Professor Discussion Leader	28	.09	.15	.13	.03	.13	. 20	i i	-,01	10
10 Professor Identification	80	.16	.18	90.	8.	.16	.16	01	!	.16

- Becker, W. C. & Krug, R. S. Parent attitude research instrument: A research review. Child Develop., 1965, 36, 329-365.
- Betz, E. L. Klingensmith, J. E. & Menner, J. W., The measurement and analysis of college student satisfaction. Meas. & evalu. in Guid. 1970, 3 102-110.
- Cattell, R. B., & Butcher, H.J. The Prediction of Achievement and Creativity. Indianaoplis, Ind.: Bobbs Merrill, 1968.
- Cattell, R. B., Krug, S., Sweney, A. B., The School Motivation Analysis
 Test(SMAT) Champaign, ILL. Institute of Personality & Ability Testing, 1969.
- Delhees, Karl, H. Cattell, R. B., & Sweney, A. B., The Structure of parents' intrafamilial attitudes and sentiments measured by objective tests and vector model. The <u>J. of Soc. Psychol., 1970, 82, 231-252.</u>
- Delhees, Karl H., Cattell, R. B., & Sweney, A. B., The objective measurement of children's intrafamilial attitude and sentiment structure and the investment subsidiation model. <u>J of Genetic Psychol</u>. 1971, 118, 87-113.
 - . The dynamic calculus: Concepts and crucial experiments. In M. R. Jones (Ed.) Nebraska Sumposium on Motivation. Lincoln, Nebr. Press, 1959.
 - Chorost, S. B. Parental child-rearing attitudes and their correlated in adolescent hostility. Genet. Psychol. Monog., 1962, 66, 49-90.
 - Itkin, W. Some relationships between intra-family attitudes and preparental attitudes toward children. J. Genet. Psychol., 1952, 80, 221-252.
 - Margolis, N. The mother-child relationship in bronchial asthma, J. Abn. & Soc. Psychol.,,1961, 63, 360-367.
 - Meier, H. C., Generation Difference in Value Orientation toward Higher Education. Soc. of Educ., 1970, 43; 69-89.
 - Pace, C. R. Comparison of CUES results from different groups of reporters. Princeton, N. J.: Educational Testing Service, 1963.
 - Rehberg, R.A. & Westby, D.L. Parental encouragement occupation, education and family size: artifactual or independent determinants of adolescent education al expectations. Social Forces, 1967, 45: 362-374.
 - Roe, A., & Siegelman, M. A parent-child relation questionnaire. Child Devel. 1963, 34, 355-369.
 - Schaefer, E. S. & Bell, R. Q., Development of a parental attitude research instrument. Child Devel, 1958, 29, 339-361.
 - Sheehan, T. Joseph, Measuring school environment, a new approach. Proceedings 77th Annual Conv. Amer. Psychol. Assoc. 1969.
 - Stringer, L. A., & Pittman, D. K., The unmeasured residual in current research on parental attitudes and child behavior. In J.C.Glidewell (Ed.) Parental Attitudes and Child Behavior. Springfield, Ill, Charles C. Thomas, 1961.



- Strodbeck, F. L., Family interaction, values, and achievement. In D. G. McClelland et al (Eds.) <u>Talent and Society</u>, Princeton, N. Y.: Van Nostrand, 1958.
- Sweney, A. B., & Bowles, J., The Chromatic Differential Test, Test Systems, Inc. Wichita, Kansas, 1971.
- Sweney, A. B., & Weston, J. R., <u>Social Values and expectations as predictors of curriculum satisfaction and academic performance in higher education.</u>
 Technical Report, Office of Education, Bureau of Research, 1971.
- Weston, J.R., & Sweney, A. B., Learning Encounter Measure, Test Systems, Inc. Wichita, Kansas, 1970.

